1. A method of fracturing a subterranean zone penetrated by a well bore having a temperature up to and above 400°F comprising pumping a viscous aqueous foamed fracturing fluid into said subterranean zone at a rate and pressure sufficient to fracture said zone, said aqueous foamed fracturing fluid comprising water, a water viscosity increasing terpolymer of 2-acrylamido-2-methylpropane-sulfonic acid, acrylamide and acrylic acid or salts thereof, a gas, a foaming agent and a viscosity breaker for effecting a controlled reduction in the viscosity of said fracturing fluid.

2. The method of claim 1 wherein said water is selected from the group consisting of fresh water and salt water.

3. The method of claim 1 wherein said acrylamido-2-methylpropane-sulfonic acid is present in said terpolymer in an amount in the range of from about 15 weight % to about 80 weight %, said acrylamide is present in an amount in the range of from about 20 weight % to about 85 weight % and said acrylic acid or salts thereof are present in an amount of from about 0.1 weight % to about 10 weight %.

4. The method of claim 1 wherein said 2-acrylamido-2-methylpropane-sulfonic acid is present in said terpolymer in an amount of about 60 weight %, said acrylamide is present in an amount of about 39.5 weight % and said acrylic acid or salts thereof are present in an amount of about 0.5 weight %.

5. The method of claim 1 wherein said terpolymer is present in said foamed fracturing fluid in an amount in the range of from about 0.2% to about 2.0% by weight of said water therein.

6. The method of claim 1 wherein said gas is selected from the group consisting of nitrogen, carbon dioxide and mixtures thereof.

7. The method of claim 1 wherein said gas is carbon dioxide.

8. The method of claim 1 wherein said gas is present in said foamed fracturing fluid in an amount in the range of from about 5% to about 95% by volume thereof.

9. The method of claim 1 wherein said foaming agent is selected from the group consisting of C_8-C_{22} alkylamidobetaines such as cocoamidopropyl betaine, alpha-olefin sulfonate, trimethyltallowammonium chloride, C_8-C_{22} alkylethoxylate sulfate and trimethylcocoammonium chloride.

10. The method of claim 1 wherein said foaming agent is cocoamidopropyl betaine.

11. The method of claim 1 wherein said foaming agent is present in said foamed fracturing fluid in an amount in the range of from about 0.1% to about 2.0% by weight of said water therein.

12. The method of claim 1 wherein said viscosity breaker is sodium bromate.

13. The method of claim 1 wherein said viscosity breaker is encapsulated sodium bromate.

14. The method of claim 1 wherein said viscosity breaker is present in said foamed fracturing fluid in an amount in the range of from about 0.005% to about 1.0% by weight of water therein.

15. The method of claim 1 wherein said foamed fracturing fluid further comprises a cross-linking agent selected from the group consisting of titanium(IV)(triethanolaminato)-isopropoxide, tetrakis(triethanolaminato)zirconium(IV) and hafnium(IV)acetylacetonate.

16. The method of claim 15 wherein said cross-linking agent is tetrakis(triethanolaminato)zirconium(IV).

17. The method of claim 15 wherein said cross-linking agent is present in said foamed fracturing fluid in an amount in the range of from about 0.02% to about 0.8% by weight of said water therein.

18. The method of claim 1 wherein said foamed fracturing fluid further comprises a buffer for maintaining the pH of said fracturing fluid in the range of from about 4 to about 6.

19. The method of claim 18 wherein said buffer is an acetic acid-acetate buffer.

20. The method of claim 18 wherein said buffer is present in said foamed fracturing fluid in an amount in the range of from about 0.1% to about 1.0% by weight of said water therein.

21. A method of fracturing a subterranean zone penetrated by a well bore having a temperature up to and above 400°F comprising pumping a viscous aqueous foamed fracturing fluid into said subterranean zone at a rate and pressure sufficient to fracture said zone, said

aqueous foamed fracturing fluid comprising water, a terpolymer of 60 weight % of 2-acrylamido-2-methylpropane-sulfonic acid, 39.5 weight % of acrylamide and 0.5 weight % of acrylic acid present in said foamed fracturing fluid in an amount of about 0.75% by weight of said water therein, carbon dioxide gas present in said foamed fracturing fluid in an amount of from about 20% to about 70% by volume of said foamed fracturing fluid, a cocoamidopropyl betaine foaming agent present in said foamed fracturing fluid in an amount of about 0.6% by weight of said water therein and a sodium bromate viscosity breaker present in said foamed fracturing fluid in an amount of about 0.35% by weight of said water therein.

22. The method of claim 21 wherein said foamed fracturing fluid further comprises a tetrakis(triethanolaminato)zirconium(IV) cross-linking agent present in said foamed fracturing fluid in an amount of about 0.5% by weight of said water therein.

23. The method of claim 22 wherein said foamed fracturing fluid further comprises an acetic acid-acetate buffer present in said foamed fracturing fluid in an amount of about 0.5% by weight of said water therein.

24. A viscous aqueous foamed fracturing fluid comprising:

water;

a terpolymer of 2-acrylamido-2-methylpropane-sulfonic acid, acrylamide and acrylic acid or salts thereof;

a gas;

a foaming agent; and

a viscosity breaker for effecting a controlled reduction in the viscosity of said fracturing fluid.

25. The fracturing fluid of claim 24 wherein said water is selected from the group consisting of fresh water and salt water.

26. The fracturing fluid of claim 24 wherein said acrylamido-2-methylpropane-sulfonic acid is present in said terpolymer in an amount in the range of from about 15 weight % to about 80 weight %, said acrylamide is present in an amount in the range of from about 20 weight % to about 85 weight % and said acrylic acid or salts thereof are present in an amount of from about 0.1 weight % to about 10 weight %.

27. The fracturing fluid of claim 24 wherein said 2-acrylamido-2-methylpropane-sulfonic acid is present in said terpolymer in an amount of about 60 weight %, said acrylamide is present in an amount of about 39.5 weight % and said acrylic acid is present in an amount of about 0.5 weight %.

28. The fracturing fluid of claim 24 wherein said terpolymer is present in said foamed fracturing fluid in an amount in the range of from about 0.2% to about 2.0% by weight of said water therein.

29. The fracturing fluid of claim 24 wherein said gas is selected from the group consisting of nitrogen, carbon dioxide and mixtures thereof.

30. The fracturing fluid of claim 24 wherein said gas is carbon dioxide.

31. The fracturing fluid of claim 24 wherein said gas is present in said foamed fracturing fluid in an amount in the range of from about 5% to about 95% by volume thereof.

32. The fracturing fluid of claim 24 wherein said foaming agent is selected from the group consisting of C_8-C_{22} alkylamidobetaines such as cocoamidopropyl betaine, alpha-olefin sulfonate, trimethyltallowammonium chloride, C_8-C_{22} alkylethoxylate sulfate and trimethylcocoammonium chloride.

33. The fracturing fluid of claim 24 wherein said foaming agent is cocoamidopropyl betaine.,

34. The fracturing fluid of claim 24 wherein said foaming agent is present in said foamed fracturing fluid in an amount in the range of from about 0.1% to about 2.0% by weight of said water therein.

35. The fracturing fluid of claim 24 wherein said viscosity breaker is sodium bromate.

36. The fracturing fluid of claim 24 wherein said viscosity breaker is encapsulated sodium bromate.

37. The fracturing fluid of claim 24 wherein said viscosity breaker is present in said foamed fracturing fluid in an amount in the range of from about 0.005% to about 1.0% by weight of water therein.

38. The fracturing fluid of claim 24 wherein said foamed fracturing fluid further comprises a cross-linking agent selected from the group consisting of

titanium(IV)(triethanolaminato)-isopropoxide, tetrakis(triethanolaminato)zirconium(IV) and hafnium(IV)acetylacetonate.

39. The fracturing fluid of claim 38 wherein said cross-linking agent is tetrakis(triethanolaminato)zirconium(IV).

40. The fracturing fluid of claim 38 wherein said cross-linking agent is present in said foamed fracturing fluid in an amount in the range of from about 0.02% to about 0.8% by weight of said water therein.

41. The fracturing fluid of claim 24 wherein said foamed fracturing fluid further comprises a buffer for maintaining the pH of said fracturing fluid in the range of from about 4 to about 6.

42. The fracturing fluid of claim 41 wherein said buffer in an acetic acid-acetate buffer.

43. The fracturing fluid of claim 41 wherein said buffer is present in said foamed fracturing fluid in an amount in the range of from about 0.1% to about 1.0% by weight of said water therein.

44. A viscous aqueous foamed fracturing fluid comprising:

water;

a terpolymer of 60 weight % of 2-acrylamido-2-methylpropane-sulfonic acid, 39.5 weight % of acrylamide and 0.5 weight % of acrylic acid or salts thereof present in said foamed fracturing fluid in an amount of about 0.75% by weight of said water therein;

carbon dioxide gas present in said foamed fracturing fluid in an amount in the range of from about 20% to about 70% by volume thereof;

a cocoamidopropyl betaine foaming agent present in said foamed fracturing fluid in an amount of about 0.6% by weight of said water therein; and

a sodium bromate viscosity breaker present in said foamed fracturing fluid in an amount of about 0.35% by weight of said water therein.

45. The viscous aqueous foamed fracturing fluid of claim 44 which further comprises a tetrakis(triethanolaminato)zirconium(IV) cross-linking agent present in said foamed fracturing fluid in an amount of about 0.5% by weight of said water therein.

46. The viscous aqueous foamed fracturing fluid of claim 45 which further comprises an acetic acid-acetate buffer present in said foamed fracturing fluid in an amount of about 0.5% by weight of said water therein.